

CLAIMS

What is claimed is:

1. A computerized method for evaluating the value of a proposed development program for a product, said method comprising:

defining an alliance structure between a first entity responsible for the development of said product and a second entity;

obtaining a set of development cost assumptions for said proposed development program;

obtaining a set of sales assumptions representing sales of said product;

randomly determining, for each of a plurality of iterations, the net present value (NPV) of said proposed development program to thereby obtain a plurality of NPVs, each of said plurality of NPVs being determined in accordance with said alliance structure, said set of development cost assumptions, said set of sales assumptions, and at least one probabilistic function; and

performing an economic analysis of said plurality of NPVs.

2. A method according to claim 1, wherein said economic analysis is based upon a statistical distribution of said plurality of NPVs.

3. A method according to claim 1, wherein said at least one probabilistic function determines whether said proposed development program results in a successfully developed product.

4. A method according to claim 1, further comprising the step of generating an output indicative of an economic value of said proposed development program.

5. A method according to claim 1, wherein:

said alliance structure includes at least one component corresponding to a first region and at least one component corresponding to a second region; and

each of said plurality of NPVs includes a first economic contribution related to said first region and a second economic contribution related to said second region.

6. A method according to claim 1, wherein:

said set of development assumptions includes at least one component corresponding to a first region and at least one component corresponding to a second region; and

each of said plurality of NPVs includes a first economic contribution related to said first region and a second economic contribution related to said second region.

7. A method according to claim 1, wherein:

said set of sales assumptions includes at least one component corresponding to a first region and at least one component corresponding to a second region; and

each of said plurality of NPVs includes a first economic contribution related to said first region and a second economic contribution related to said second region.

8. A method according to claim 1, wherein at least one of said plurality of NPVs is calculated in accordance with the following relationship: $NPV = Pe^{-rt}$, where P represents a lump sum payment amount, r represents a periodic cost of capital, and t represents a number of periods before payment.

9. A method according to claim 1, wherein at least one of said plurality of NPVs is calculated in accordance with the following relationship:

$$NPV = \int_{T1}^{T2} Ae^{-rt} dt = \frac{A}{r} (e^{-rT1} - e^{-rT2}),$$
 where A represents a constant cash flow rate, r represents a periodic cost of capital, $T1$ represents a start of a time period during which the cash flow occurs, and $T2$ represents an end of said time period.

10. A method according to claim 1, further comprising the step of adjusting a previously-calculated NPV in response to a time offset to calculate an adjusted NPV, said adjusted NPV being calculated in accordance with the following

relationship: $NPV_2 = NPV_1(e^{-rt})$, where NPV_2 represents said adjusted NPV, NPV_1 represents said previously-calculated NPV, r represents a periodic cost of capital, and t represents said time offset.

11. A computer program, embodied on a computer-readable medium, for evaluating the value of a proposed development program for a product, said computer program comprising:

a first program code segment containing instructions for defining an alliance structure between a first entity responsible for the development of said product and a second entity;

a second program code segment containing instructions for obtaining a set of development cost assumptions for said proposed development program;

a third program code segment containing instructions for obtaining a set of sales assumptions representing sales of said product;

a fourth program code segment containing instructions for randomly determining, for each of a plurality of iterations, the net present value (NPV) of said proposed development program to thereby obtain a plurality of NPVs, each of said plurality of NPVs being determined in accordance with said alliance structure, said set of development cost assumptions, said set of sales assumptions, and at least one probabilistic function; and

a fifth program code segment containing instructions for performing an economic analysis of said plurality of NPVs.

12. A computerized method for evaluating the value of a proposed development program for a product, said method comprising:

obtaining a set of development cost assumptions corresponding to a number of product development stages;

determining, using a probabilistic function, a successfully completed product development stage for said proposed development program;

computing a time duration for said successfully completed product development stage; and

calculating a net present value (NPV) for said proposed development program in response to said set of development cost assumptions and in response to said time duration.

13. A method according to claim 12, wherein:

said obtaining step is performed by a client computer system; and

said client computer system obtains said set of development cost assumptions from a server computer system that communicates with said client computer system via a communication link.

14. A method according to claim 12, further comprising the step of creating said set of development cost assumptions in response to empirical product data.

15. A method according to claim 12, wherein said computing step computes said time duration using a second probabilistic function.

16. A method according to claim 12, further comprising the step of repeating said determining step, said computing step, and said calculating step for a number of iterations.

17. A method according to claim 12, further comprising the step of obtaining a set of sales assumptions representing sales of a developed product.

18. A method according to claim 17, wherein said set of sales assumptions represents a flat sales characteristic with respect to time.

19. A method according to claim 17, wherein said set of sales assumptions represents a variable sales characteristic with respect to time.

20. A method according to claim 17, further comprising the step of evaluating, with said set of sales assumptions, potential sales of said product.

21. A method according to claim 20, wherein:

said number of product development stages includes a final product development stage; and

said evaluating step is performed if said successfully completed product development stage represents said final product development stage.

22. A method according to claim 20, wherein said evaluating step is performed in accordance with a second probabilistic function.

23. A method according to claim 17, further comprising the step of creating said set of sales assumptions in response to empirical product data.

24. A method according to claim 12, wherein said calculating step comprises the step of processing projected costs and income associated with said proposed development program.

25. A method according to claim 24, wherein said calculating step further comprises the step of processing projected income associated with sales of said product.

26. A computer program, embodied on a computer-readable medium, for evaluating the value of a proposed development plan for a product, said computer program comprising:

a first program code segment containing instructions for obtaining a set of development cost assumptions corresponding to a number of product development stages;

a second program code segment containing instructions for determining, using a probabilistic function, a successfully completed product development stage for said proposed development program;

a third program code segment containing instructions for computing a time duration for said successfully completed product development stage; and

a fourth program code segment containing instructions for calculating a net present value (NPV) for said proposed development program in response to said set of development cost assumptions and in response to said time duration.

27. A computerized method for evaluating the value of a proposed development program for a product, said method comprising:

obtaining a set of development cost assumptions for said proposed development program;

repeatedly calculating a net present value (NPV) for said proposed development program to obtain a plurality of NPVs, each of said plurality of NPVs being calculated in response to said set of development cost assumptions and in response to at least one probabilistic function; and

generating a statistical representation of said plurality of NPVs.

28. A method according to claim 27, wherein said generating step generates a mean NPV for said plurality of NPVs.

29. A method according to claim 27, wherein said generating step generates a median NPV for said plurality of NPVs.

30. A method according to claim 27, wherein said generating step generates an NPV distribution for said plurality of NPVs.

31. A method according to claim 27, wherein said at least one probabilistic function determines whether said proposed development program results in a successfully developed product.

32. A method according to claim 27, further comprising the step of determining, in response to empirical product development data, whether said proposed development program results in a successfully developed product.

33. A method according to claim 27, wherein said at least one probabilistic function determines the duration of said proposed development program.

34. A method according to claim 27, further comprising the step of determining, in response to empirical product development data, the duration of said proposed development program.

35. A method according to claim 27, further comprising the step of defining an alliance structure between a first entity and at least one other entity, said first entity being responsible for the development of said product, wherein each of said plurality of NPVs is further calculated in response to said alliance structure.

36. A method according to claim 35, wherein said alliance structure is defined such that said at least one other entity provides economic support to said first entity during said proposed development program.

37. A method according to claim 35, wherein said alliance structure is defined such that said at least one other entity obtains an economic benefit derived from sales of said product.

38. A method according to claim 35, wherein said defining step defines a guaranteed payment schedule that represents guaranteed payments from said other entity to said first entity.

39. A method according to claim 38, wherein said guaranteed payment schedule identifies a development program stage that determines when guaranteed payments are made.

40. A method according to claim 35, wherein said defining step defines a sponsored research schedule that represents sponsored research benefits given to said first entity.

41. A method according to claim 40, wherein said sponsored research schedule identifies at least one time period during which said sponsored research benefits are given to said first entity.

42. A method according to claim 35, wherein said defining step defines a milestone payment schedule that represents milestone payments from said other entity to said first entity.

43. A method according to claim 42, wherein said milestone payment schedule identifies a plurality of product development stages and a corresponding plurality of milestone payments.

44. A method according to claim 35 wherein said defining step defines an expense reimbursement schedule that represents expense reimbursements given to said first entity.

45. A method according to claim 44, wherein said expense reimbursement schedule identifies a plurality of product development stages and a corresponding plurality of expense reimbursement percentages.

46. A method according to claim 35, wherein said defining step defines a royalty payment schedule including at least one royalty rate.

47. A method according to claim 46, wherein said royalty payment schedule identifies a number of threshold royalty amounts corresponding to a like number of royalty rates.

48. A method according to claim 46, wherein said royalty payment schedule identifies a number of time periods corresponding to a like number of royalty rates.

49. A method according to claim 35, wherein said defining step defines a profit splitting arrangement between said first entity and said other entity.

50. A method according to claim 49, wherein said profit splitting arrangement identifies at least one profit splitting percentage.

51. A method according to claim 50, wherein said profit splitting arrangement identifies at least two profit splitting percentages and at least one time period during which one of said at least two profit splitting percentages is effective.

52. A method according to claim 50, wherein said profit splitting arrangement identifies at least two profit splitting percentages and at least one sales threshold corresponding to one of said at least two profit splitting percentages.

53. A method according to claim 35, wherein said defining step defines a supply agreement.

54. A method according to claim 53, wherein said supply agreement identifies a portion of net sales returned to said first entity.

55. A method according to claim 53, wherein said supply agreement identifies a percentage of manufacturing costs returned to said first entity.

56. A method according to claim 35, wherein said step of defining an alliance structure is responsive to historical alliance data.

57. A method according to claim 27, further comprising the step of obtaining a set of sales assumptions that represents sales of a product successfully developed under said proposed development program, wherein each of said plurality of NPVs is further calculated in response to said set of sales assumptions.

58. A method according to claim 57, wherein said at least one probabilistic function determines a simulated sales scenario based upon said set of sales assumptions.

59. A method according to claim 58, wherein said simulated sales scenario represents a flat sales characteristic with respect to time.

60. A method according to claim 58, wherein said simulated sales scenario represents a variable sales characteristic with respect to time.

61. A method according to claim 57, further comprising the step of determining a simulated sales scenario based upon said set of sales assumptions and based upon empirical product sales data.

62. A computer program, embodied on a computer-readable medium, for evaluating the value of a proposed development program for a product, said computer program comprising:

a first program code segment containing instructions for obtaining a set of development cost assumptions for said proposed development program;

a second program code segment containing instructions for repeatedly calculating a net present value (NPV) for said proposed development program to obtain a plurality of NPVs, each of said plurality of NPVs being calculated in

response to said set of development cost assumptions and in response to at least one probabilistic function; and

a third program code segment containing instructions for generating a statistical representation of said plurality of NPVs.

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